# Method of Democratic Deliberation of Technology Project and Societal Governance

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*Publication date:*
2009

# MIAUCE

Multi modal Interaction Analysis and exploration of Users within a Controlled Environment
IST Call 5, FP6-2005-IST-5
**www.miauce.org**

## Method of Democratic Deliberation of Technology

## *Project and Societal Governance*

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CITA University of Namur Sept 2009

# Introduction and Context

This guide addresses the question of the status and of the responsibility of human sciences in technological project funded by European Commission, that aims at developing surveillance, detection and monitoring systems targeted at human beings. Besides technological challenges, these technologies raise societal issues with crucial impacts on both the individual autonomy of the 'users' and the vitality of the democracy, two societal values we consider mutually productive of each-other, or "co-original"[1]. This guide gives an overview of the experience and reflections of the authors who, from their respective backgrounds in ethics, law and sociology, have now been committed in the MIAUCE project for a time sufficient to draw the

[1] The relationship between co-originality, in the sense given to the concept by Habermas against Rawls (co-originality of individual and collective autonomy, inseparability of individual liberty and deliberative democracy), and co-construction, in the sense given by Jasanof (co-construction of techno-science and society through the mutual reinforcement of the representational regimes carried by technology and in society.)

*Maybe the concept of co-generationality may be misleading in the present context, if the reader tries to connect it to the known theories of co-originality and co-construction. We would opt for using "co-originality" here, as it situates our thought from the start in the habermasian theory of communicational action, which is quite relevant for our position.*

For references, on the relation between private and public autonomy, here is the text of the footnote 19 of Antoinette Rouvroy's paper on « Privacy, Data Protection, and the Unprecedented Challenges of Ambient Intelligence », Studies in Ethics, Law and Technology , Berkeley Electronic Press, 2008. :

« The inspiration for the link between private and public autonomy (the idea that they are 'co-originated' or mutually productive of each-other) is to be found in Jürgen Habermas's discourse theory of law (especially in Between Facts and Norms, MIT Press, 1996) according to which "Just those action norms are valid to which all possibly affected persons could agree as participants in rational discourses". One could interpret as an application of this thesis of the co-origination thesis the defense of privacy on the ground of its structural value for society to be read, for example, in Paul M. Schwartz, and William M. Treanor, "The New Privacy", Michigan Law Review, 101, 2003, p.216. On deliberative autonomy, see James E. Flemming, "Securing Deliberative Autonomy", Stanford Law Review, Vol. 48, N.1, 1995, pp. 1-71, arguing that the bedrock structure of deliberative autonomy secures basic liberties that are significant preconditions for persons' ability to deliberate about and make certain fundamental decisions affecting their destiny, identity, or way of life. On deliberative democracy, see James E. Flemming, "Securing Deliberative Democracy", Fordham Law Review, Vol. 72, p. 1435, 2004. Endorsing the concept of a co- originality of private and public autonomy as developed by Jürgen Habermas in Between Facts and Norms. On the concept of co-originality, see Rainer Nickel, "Jürgen Habermas' concept of co- originality in times of globaliation and the militant security state", IUE Working Paper Law, 2006/27. »

first methodological conclusions regarding their interactions with scientific and industrial partners specialized in body recognition and tracking technologies, and their applications.

## 1. From technology assessment to value sensitive design

Along the different framework programs (FPs) organized by the European R&D, the status and responsibilities of human sciences have evolved. Three major steps characterize this evolution, showing a gradual shift from a general policy advisory role to a more local and instrumental role inspired by the "value sensitive design" paradigm. At the very beginning of the FPs, human sciences were supposed to provide political guidance and recommendations regarding the Commission's technological policies and investments. At this stage, a major challenge consisted in providing an advisory body composed of human scientists with an institutional settlement that would guarantee their independence and autonomy, against various pressures and undue influences from political, technological and industrial spheres. Following criticisms motivated by the general advisory recommendations' lack of impact over projects at work, a second step in the evolution of the role of SHS in FPs was marked by the development of TSER programs which funded human sciences projects dedicated to societal aspects involved in R&D projects supported by the Commission. The results of this second step were also much criticized for keeping technical and societal projects separated and without interactions. In order to respond to the crucial necessity of interdisciplinarity and dialogue between SHS and technology, a further strategy has been deployed in FP6 and FP7, integrating SHS into technical R&D projects, with the specific responsibility to impact on technical designs as to make them, from the start, "socially compliant" or acceptable. This strategy, inspired by social constructivism and by the theories of the social shaping of technology, which all consider that technological artifacts are socially constructed by the actors involved in both their design and appropriation. At the methodological level, this theoretical position has given rise to the so-called "value sensitive design" oriented towards an enhanced integration of 'moral values' from the very starting stage of technological design.

## 2. Two main levels of intervention

The societal shaping of a technology requires two main levels of intervention:

- the micro-level concerns the internal governance of the project, the societal scene being here restricted to the teams of industrials and scientists involved in the project. On that scene, the main task is to set up the conditions for a sound collective deliberation on ethical issues and dilemmas raised by the project.
- the macro-level concerns the “external governance” of the project, aiming at including “society at large” into the deliberations about the technologies at work. At stake is the possibility to make a wider deliberation emerge from the restricted scene of one specific project and, in this way, to contribute to building the conditions for widening the democratic debate around these technologies and the societal issues they involve.

# Part 1. The Internal Governance of the Project

# Introduction

This first part of the chapter addresses the major issues raised by the full implication of Human Scientists in the design of a technology. It is mosly developed towards the learning experience we capitalized into the MIAUCE project. It is divided in three parts. First of all, the discussions do concern the limits of our initial or original mandates in the MIAUCE project. In the second part, we present the general principles and values that have supported and framed our intervention in this design. The third part addresses the methodological steps we have elaborated to manage our intervention in the project design.

# 1. The Limits of an Instrumental Position

The position of human scientists should be very clear form the beginning of the project. Two main statements can be done. The first one refuses the status and the responsibilities of the expert in charge of telling what is good, fair, reasonable to adopt a position of facilitator who helps all the stakeholders to deliberate the technology. The second one questions the limits of the social acceptability concept traditionally used to analyze a technology in progress. Both of these statements go in the same direction : a clear refuse to reduce the human scientists' role to an instrumental one.

## 1.1. The limits of the expert's status

Usually, human sciences play an instrumental role in technological project. Engineers as industrials expect that they fix a socially acceptable frame for their design telling them what they can do and what they should do according to some normative and ex-ante principles. This confirms the position of human scientists as instrumental experts.

The adopted position is very inspired by Jean Ladrière[2] approach of ethics. More than a set of standards to be complied with, ethics, Jean Ladrière suggests, is a "savoir-faire", a capacity to make moral choice when faced with situations raising unprecedented ethical dilemmas or challenges. In that frame, Ladrière emphasizes that ethics is not the 'exclusive business' of

[2] Ladrière, J., *L'éthique dans l'univers de la rationalité*, Artel / fides, Namur, 1997.

experts in ethics: ethics cannot be transferred or learned as a theoretical knowledge but has to be practiced in order to be genuinely appropriated by those who face an ethically challenging situation. As a consequence, Ladrière explains:

> *... nobody has a privileged competency in ethics. This is why an ethical approach could only be a collective process through which the different positions have to be confronted, with the hope of a convergence of these positions justified by the believe of the universality of the human reason*[3].

Following Ladrière's position forces us to consider alternative figures we have and could endorse, as human scientists in a technological project, and to clearly identify our responsibilities and legitimacy into the project.

This status must be defined according to the pedagogical aims human scientists should try to achieve into a technological project. By pedagogical aims, we mean a clear refutation of any expert approach in which human scientists would endorse the responsibilities of defining the good, the fair nor legitimize the project and its technological specifications.

According to Ladrière, as already pointed out, ethics is based on ability or capability. It is not a theoretical or normative abstract knowledge that one could define and transfer to others. But it is a *praxis*, an ability to face a situation ethically.

This position is very close to those one developed by Dewey[4] who underline that the permanent research of universal and fixed norms into ethical approach can be compared to the quest of certainty in epistemology, which is at the source of so many problems badly defined and solved. In that sense, the role of the so-called expert is not to decide in place of the concerned actors but to facilitate the deliberation and to enlighten it by clarifying the ethical questions raised by the situation at work.

## 1.2. The limits of the 'social acceptability' concept

The usual mandate expect of human scientists in technological project consists in addressing the social, legal and ethical issues raised by the surveillance and observation technologies developed in the project, and to assess its social acceptability.

Let us consider this concept of "social acceptability".

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[3] Ibidem

4 Dewey, John. Démocratie et éducation. Paris : Armand Collin, 1975 (1st edit : 1916)

Inspired by a kind of preference utilitarianism maintaining that whatever satisfies the preferences or desires of an individual involved in an action is morally right (see, for instance P. SINGER), M.W. BRUNSON [5] defines social acceptability as:

> *A condition that results from a judgmental process by which individuals 1) compare the perceived reality with its known alternatives; and 2) decide whether the real condition is superior, or sufficiently similar, to the most favourable alternative condition.*

According to BRUNSON, the term 'social acceptability' refers to aggregate forms of public consent whereby judgments are shared and articulated by an identifiable and politically relevant segment of the citizenry. In this perspective the norms emerge form a democratic exercise involving all the concerned actors.

Beyond the pragmatic problems (democratic representation, deliberative procedures, asymmetry of actors capabilities, etc) raised by such an approach, this social acceptability approach confronts us to two major problems.

- First, the concept of social acceptability conveys us to a scene on which the technological project and its embedded social meanings cannot be refused nor contested but merely adjusted, re-shaped as to make it compliant to the 'public' judgment and settlement. Using this social acceptability realm forecloses any radical critique, opposition or contestation, and subtly engages us on the path of silent conciliation. In other words, this arguably narrows the margins of action or the latitudes we have, as social scientists, in this type of exercise. That is why, following the recommendation drawn by Marris and alii, we will not indicate

> *"how to improve the social acceptability [...] without changing the nature of that which is "accepted" (…) "Improving the social acceptability" of technology can be envisaged stereotypically either as rendering a proposed finished technology (or product, or decision) accepted by promoting change among the public or as rendering the technology acceptable, by promoting change in the technology development path. The first interpretation is the most commonly found, both in the expectations of those who promote (and fund) the public perception research, and in the work of some social scientists in the field. We do not believe that social science research can or should aim simplistically to improve the social acceptability of technologies, if it means to facilitate the smooth (uncontroversial) social uptake of a*

[5] Brunson, M., W., « A definition of "social acceptability" in ecosystem management" in Brunson, M., Kruger, L., Tyler, C. and Schroeder, S., (Eds.), *Defining social acceptability in ecosystem management: a workshop proceedings*, General technical Report PNW-369, Portland, 1996.

> *technology without making any changes in the technology development path. Instead, we suggest that social science research could be used by decision-makers to circumvent or reduce public opposition to technologies, but only to extent that decision-makers utilizing the results take on board that it is perhaps not so much the misguided public which needs to be reformed, but the institutional practice and technological objects which this public is reacting against. ".* [6]

- The second problem inherent to this approach concerns the legitimacy of the norms produced by such utilitarian reflection since it postulates that what is acceptable for a majority is good for all. This raises questions regarding the soundness or the goodness of the norms that can emerge from such social acceptability exercise. In practice, this exercise threatens the non conditionality of the individual fundamental rights, and renders the pursuit of social justice dependent of the good will of the majority. Current public debates about the deployment of video surveillance epitomize the phenomenon as it exhibits a trade-off between liberty (and privacy) rights and aspirations to security by the majority.

# 2. The Principles and Values

The limits of the social acceptability concept raise complex questions with regard to the principles (status and definition) that could frame the human sciences intervention in a technological project.

## 2.1. From normative to explorative ethical principles

If we refer to the ethical approach defined by Ladrière[7], this one can only be collective and democratic, based on the confrontation of different positions. In this collective deliberation, the responsibilities of the human scientists are to explore the issues involved by the technologies in progress, to elaborate methodologies to support a sound democratic deliberation and to inform with his/her knowledge of the ethical tradition or cultural heritage in order to frame the deliberation.

This position is much in line with what Dewey[8] suggests when saying that we never affront an ethical problem from a "tabula rasa", without using some ethical references or principles

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[6] Marris et alii, *PABE Final Report*, 2001, p. 14.

[7] Ladrière, J., *L'éthique dans l'univers de la rationalité*, Artel / fides, Namur, 1997.

[8] Dewey, J., *ibid*, 1975.

transmitted by the tradition. But for Dewey as for Ladrière, these principles are not fixed rules that could, as in a cooking recipe, tell by themselves what to do, how to act, determining quasi mechanically the fair way or the ethical course for our decision and action. For Dewey, these principles are explorative or analytical tools useful to enlighten a situation and to assess the various points of view expressed by the concerned actors. Dewey admits that general ideas such as justice, dignity, or fairness are of value as tools of inquiry to question and forecast unknown ethical puzzles. They have no intrinsic normative force but constitute a sort of moral background that may help facing an unknown moral situation.

## 2.2. In search of explorative principles

In order to embrace these authors' views, it is important to render explicit the moral background or the exploratory principles that frame the human scientists' intervention. To do this exercise, one could be inspired by the concept of parrhesia developed by Foucault[9] (1983).

> *"Parrhesia is a verbal activity in which a speaker expresses his personal relationship to truth, and risks his life because he recognizes truth-telling as a duty to improve or help other people (as well as himself). In parrhesia, the speaker uses his freedom and chooses frankness instead of persuasion, truth instead of falsehood or silence, the risk of death instead of life and security, criticism instead of flattery, and moral duty instead of self-interest and moral apathy."*

This attitude appears to be very critical in order to first situate the human scientists' speech into a technological project and secondly to make more explicit the implicit background they are using to explore the unprecedented ethical situation created by the technologies at work.

Two main explorative principles or values appear at the front end of our tradition or cultural heritage and therefore emerge strongly when human scientists endorse this parrhesiast attitude. These principles shape a sort of community of understanding of the situation experienced, as human scientists, into a technological project.

The first principle relates to the autonomy of the subject and the second, to the democracy of the society, these two terms being intrinsically related by a process of co-originality each being a necessary (but not sufficient) condition of the other.

Let us examine those two principles.

### *2.2.1. From autonomy to capability*

The autonomy of a person can be approached in a very broad and protectionist way of thinking defining the rights, the privacy and the liberty to be protected. But the concept of autonomy refers also and critically to a person's capacity for self-determination in the context of social or moral choices. However, this definition is very broad and difficult to work with since it remains very abstract and universal.

To render the concept of autonomy more tangible and workable into a technological project, the concept of capability developed by A. Sen[10] and M. Nussbaum[11] is interesting for its explorative feature. M. Nussbaum defines the concept of capability by raising the Aristotelian question *"What activities characteristically performed by human beings are so central that they seem definitive of the life that is truly human?"*.

Her answer consists in the identification of the ten fundamental capabilities that make the life human.

> ***1.*** **Life.** *Being able to live to the end of a human life of normal length . . .; not dying prematurely . . .*
>
> ***2.*** **Bodily health** *. . . Being able to have good health, including reproductive health; being adequately nourished . . .; being able to have adequate shelter . . .*
>
> ***3.*** **Bodily integrity**. *Being able to move freely from place to place; being able to be secure against violent assault, including sexual assault . . . ; having opportunities for sexual satisfaction and for choice in matters of reproduction*
>
> ***4.*** **Senses, imagination, thought**. *Being able to use the senses; being able to imagine, to think, and to reason--and to do these things in . . . a way informed and cultivated by an adequate education . . . ; being able to use imagination and thought in connection with experiencing, and producing expressive works and events of one's own choice . . . ; being able to use one's mind in ways protected by guarantees of freedom of expression with respect to both political and artistic speech and freedom of religious exercise; being able to have pleasurable experiences and to avoid non beneficial pain*
>
> ***5.*** **Emotions**. *Being able to have attachments to things and persons outside ourselves; being able to love those who love and care for us; being able to grieve at their absence, to experience longing, gratitude, and justified anger; not having one's emotional developing blighted by fear or anxiety. . . .*
>
> ***6.*** **Practical reason**. *Being able to form a conception of the good and to engage in critical reflection about the planning of one's own life. (This entails protection for liberty of conscience.)*

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[10] Both the concept of capability and substantial justice have first been developed by the Nobel Prize Amartya SEN in Inequality Re-examined, Oxford University Press, 1992 and in the book published in collaboration with Martha NUSSBAUM, Quality of Life, Oxford Clarendon Press, 1993.

[11] This part is based on the synthesis made by J. Garret : Martha Nussbaum : on Capabilities and Human Rigths, www.wku.edu/~jan.garrett/ethics/nussbaum.htm

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|---|
| ***7.*** **Affiliation**. *Being able to live for and in relation to others, to recognize and show concern for other human beings, to engage in various forms of social interaction; being able to imagine the situation of another and to have compassion for that situation; having the capability for both justice and friendship. . .* |
| ***8.*** **Other species**. *Being able to live with concern for and in relation to animals, plants, and the world of nature.* |
| ***9.*** **Play**. *Being able to laugh, to play, to enjoy recreational activities.* |
| ***10.*** **Control over one's environment**. *(A)* Political*: being able to participate effectively in political choices that govern one's life; having the rights of political participation, free speech and freedom of association . . . (B)* Material*: being able to hold property (both land and movable goods); having the right to seek employment on an equal basis with others . . .* |

*Table 1. Martha Nussbaum's capability concept*

*Source : List elaborated by J. Garret (op. cit.) from Martha Nussbaum,* ***Sex and Social Justice****, Oxford University Press, 1999*

According to Nussbaum, those capabilities define life as human and are the necessary conditions for the human autonomy. This means also that any changes being technological or political treating critically one of those capabilities treat at the same time the humanity of the life. This list of capabilities as deployed by M. Nussbaum constitutes an interesting explorative guide to question the technology at development.

### *2.2.2. From autonomy to democracy*

The second term or explorative principle consists in democracy, considered as a critical social organization that guarantees the possibility of constant renegotiation of the basic rules of fairness and justice. This concept of democracy is also very central at the front end of our tradition and cultural heritage. Here again, the concept is very broad and has to be refined in order to give it its explorative capacity. Very in line with the autonomy concept, the constructive dimension of the democracy as well expressed by A. Sen[12] renders it more helpful for an explorative approach. According to A. Sen, democracy enriches the life of the citizens for three critical reasons :

> *« First, political freedom is a part of human freedom in general, and exercising civil and political rights is a crucial part of good lives of individuals as social beings. Political and social participation has intrinsic value for human life and well-being. To be prevented from participation in the political life of the community is a major deprivation . Second… democracy has an important instrumental value in enhancing the hearing that people get in expressing and supporting their claims to political attention (including claims of economic needs). Third…the practice of democracy gives citizens an opportunity to learn from one another, and helps society to form its values and priorities…*

[12] Sen, A., "Democracy as Universal Value" in *Journal Of Democracy*, 10.3, 1999

> *In this sense, democracy has constructive importance, in addition to its intrinsic value for the lives of the citizens and its instrumental importance in political decisions.»*

According to this approach, democracy is at the same time the condition for the autonomy of human individuals and conditioned by this autonomy. The value of democracy concerns its constructive role since, as well underlined by A. Sen, as a process, democracy plays a critical role in the formation of values and in the understanding of needs, rights and duties [13].

These two concepts of capability and constructive democracy have shaped the explorative frame to deliberate the technology at work into the MIAUCE project.

[13] See also on this approach : Sunstein, C., R., *Why Societies needs Dissent*, Harvard University Press, 2005.

# 3. Methodological Steps for the Project Governance

This section concerns the different methodological steps deployed to foster a democratic deliberation to face the ethical and societal choices raised by the technology at development. During those steps, human scientists play a role of "facilitator". This role is difficult to negotiate since the explicit expectations of the scientific and industrial partners are usually demanding for the figure of the expert, deciding for them on ethical issues, giving them clear indications of what is socially acceptable and what is not, and of how to design the technology and its applications as to make them socially acceptable and compliant with legal requirements.

## 3.1. The learning step : disclosing the technology

"Learning" is the first step that human scientists have to adopt into a technological project. In fact, the project confronts human scientists to unknown technological devices that they have to deeply understand in their specifications and constraints in order to be able to dialogue with their scientific, technical and industrial partners in the project. This learning process does not only concern the technical bases and knowledge at work into the project but also the inherent or implicit societal assumptions guiding and shaping the design of these technologies. For Williams and Edge [14],

> *Technology does not develop according to an inner technical logic but is instead a social product, patterned by the conditions of its creation and use. Every stage in the generation and implementation of new technologies involves a set of choices between different technical options. Alongside narrowly `technical' considerations, a range of `social' factors affect which options are selected - thus influencing the content of technologies, and their social implications.*

In that sense, being involved from the design stage of technological development gives to the human scientists an interesting opportunity to investigate the technology from an 'inner' point of view and to better approach technical choices and the related assumptions regarding human beings and societal meanings.

[14] R. WILLIAMS and D. EDGE (1996), *The Social Shaping of Technology*, In Research Policy Vol 25.

Following Introna (2003)[15] every technological artifact can be considered as a micropolitics, as a script that incorporates social and political orderings, norms and values. This learning stage aims at disclosing the technology in order to understand its embedded micropolitics. This micropolotics is made of technological choices and the presence of those choices makes the technology negotiable. For Williams and Edge,

> *there are `choices' (though not necessarily conscious choices) inherent in both the design of individual artifacts and systems, and in the direction or trajectory of innovation programmes. If technology does not emerge from the unfolding of a predetermined logic or a single determinant, then innovation is a 'garden of forking paths'. Different routes are available, potentially leading to different technological outcomes. Significantly, these choices could have differing implications for society and for particular social groups. The characters of technologies, as well as their social implications, are problematised and opened up for enquiry.*

To understand the choices made in the project and to make the micropolitics transparent, human scientists have to work intensively with the computer scientists in order to open or to render transparent the first specifications of the technology. This first stage aims at disclosing the embedded normativity in the considered technological constructs that should support the project.

Central to this stage is the visits to the laboratories that human scientists have to perform. During those visits, computer scientists have to open the building blocks of their technologies but also the hypotheses made to make them evolved. At the end of those visits, human scientists must be able to explain the technological choices (effective and in progress) and their related hypotheses. To validate this explanation, human scientists can make visit reporting addressed to the members of the concerned laboratories.

**Illustration based on the MIAUCE project**

Visits to the three associated labos have been organized during the three first months of the project with a stay of two or three days in each labo.

- The first one was specialized in body and flow tracking, testing different algorithms to detect abnormal situation. Two main layers of choice were analyzed with the computer scientists : the first one concerns the possibility to identify a singular individual (being

[15] [15]Introna, Lucas. "The Ethics of Things". Working Paper, Lancaster University Management School, WP 2003/090, 19p.

based on his/her face or morphology) with the different tested algorithms, this first choice being related to issues concerning privacy and data protection. The second choice did concern the concept of normality or abnormality as the central reference of the future technological system. Regarding this concept, the computer scientists point out the responsibility of the industrials to parameter the specifications of a normal and abnormal situation. They consider the technology as neutral and open to support various specifications. This claim for neutrality is very common but should be questioned with the help of some "dark examples" to render visible the non neutrality of the technology in progress and the risks to not consider possible pernicious usage of their algorithms from the very early stage of their design.

- The second labo was specialized in facial recognition of (basic) emotions. The first layer of system aims at capturing a vectorial mask of an individual's face and to compare it to a sort of 'grammar of emotions' based on a large data basis covering recorded masks and their emotional meanings. The second layer concerns the eyes gaze tracking in order to associate an emotion to a looked object or situation. Both the technologies covered by this labo were already well defined and mastered by the computer scientists. This renders the situation more difficult in the sense that the technologies and their designers were in somehow less open to deliberation than the previous ones. A contrario, the choices made in this technological design are quite clear and raise important questions regarding the reduction of emotions to vectorial masks of faces and regarding the cultural validity of such an approach.
- The third labo was specialized in dynamic contextualization of information according to declarative profiles and to learning process that make the profiles evolved according to a continuous tracking of users' habits (click trough, downloaded pages, mouse's moves …). This technology can be presented as a transversal technology that supports both the flow and body tracking technology providing the users with a system of interpretation of the captured data based on contextual elements (shadows, time of the day, …) and the facial recognition of emotion since this last system should enrich and make evolve the declarative profiles in order to create dynamically users' preferences that configure the users' environment. This labo has a critical role in the project since it plays a semantic role in charge of giving the contextual interpretation of the captured data and by then in charge of giving rise to human interventions or to automated user's environment adaptation. Many choices are embedded in this

technology: choices regarding the definition of relevant criteria to define a context, regarding relevant criteria to define expressively or/and automatically a users' profile, regarding the definition of the so-called users' preferences. Many choices are also related to the methods and the criteria to use to assess the validity of the technology in a specific context. All those choices are very open and are at evidence non neutral since they could have critical implications for the society.

### *3.2. The translation step : societal framing of technology*

The second step adopted by the human scientists in a technological project aims at replacing the technology in a broader societal context that can explain the rationality at work to support this type of technological development. This step is lead by human scientists.

This exercise is critical to understand the issues raised by these technologies regarding the autonomy of the individuals and the vitality of democracy.

The first stage questions the epistemic settlement of these technologies showing their societal specificities. It is important at this stage to question what makes the essence of the technology as far as its vision of social ordering and value is concerned and to explore its impacts with the help of the two explorative principles defined here above : autonomy and democracy.

The second stage consists in understanding the major societal features that guide this technological development. In other words, this stage aims at understanding the broader societal context and value that motivate researches and initiatives in this technological field.

The third stage consists in a first exploration of the major ethical, social and legal issues raised by the considered technology. This first exploration remains quite broad and theoretical. To make those issues more tangible for computer scientists and industrials, a work on applicative scenarios is developed in the next step.

Through those stages, the major societal trends and expectations that give rise to such project are questioned in order to clarify its societal background. This societal background can be approached through the analysis of both scientific literature and political discourses that compose the implicit or explicit frame of the project. At this stage, the role of human scientists consists in drawing this framing landscape, the cultural, social, economic,

philosophical specificities of the time that encourage the development of such projects whilst also supporting the claimed legitimacy of its resulting applications.

This translation step is important, for it allows to better capture the rationality and the "claimed legitimacy" supporting this kind of projects and the subsequent assumptions about the added value it brings to the society. In order word, this research aims at unveiling the regimes of justification (Boltanksi and Thévenot[16]) or the 'Cui Bono' framing the project.

**Illustration based on the MIAUCE project**

Exploring the epistemic settlement of the technology at work in MIAUCE needs a good understanding of the technological paradigm (technology itself and the major hypotheses) that governs its development. The technology combines multimodal capture of data "extracted" from human bodies (facial expressions, eye gaze, postures and motions) with an implicit understanding or interpretation of these data as valid and privileged sources of "truth" about the persons, their preferences, intentions etc. This "multimodal observation paradigm" follows the preconception according to which the 'body does not lie' whereas, *a contrario* anything transiting through the prism of individuals' consciousness is *a priori* suspect and unreliable. This paradigm and its related hypothesis raise important issues regarding the subjects' self-determination (autonomy). The deterministic codes of intelligibility built in the multimodal observation paradigm do not allow individuals to impact on the "informational image" compiled of themselves nor on the interpretation thereof. Moreover the "informational" image of the subject has performative effects on the real subject's perceptions of what is expected in terms of attitudes, behaviours and preferences, with the result of increased anticipative conformity in society and by then raises important issues for the vitality of our democracy.

These technologies are in line with a broader societal context that can explain their current developments and investments.

[16] Boltanksi, L. and Thévenot, L., De la justification. L'économie de la grandeur, Gallimard, Paris, 1999.

According to C. Norris and alii [17] the growing presence and deployment of observation technologies can in part be explained by what they called 'the globalised trends of the late modernity':

> *The globalised trends of late modernity have accelerated this growth. Increasing urbanisation has exacerbated the trend towards anonymity, leading to concerns over establishing and verifying identity. Increasing mobility, both locally and internationally, have given rise to a global 'stranger society', where social control and governance based on intimacy and face-to face knowledge are increasingly less viable. Risk management has also become the dominant mode of reasoning for both international corporations and governments alike. In the realm of criminal justice, reformist ideals have given way to more modest preventative responses that focus on 'opportunity reduction', 'situational prevention' and 'risk management', and CCTV can be seen as part of the trend towards a New Penology based on actuarialism (c.f.: Feely and Simon, 1994).*

This late modernity can be characterized as liquid modernity, according to Z. Bauman[18], marked by a very fast mobility of information and persons and by then a decrease of the social normativity based on solid references as proximity, territory, class, frontiers, states… This creates a general context of uncertainty due to the lost of collective references creating a demand for new disposals of observation based on physical or body truth.

So, even if the MIAUCE scenarios have not, as such, surveillance and prevention of insecurity as explicit finalities, they nonetheless rely on purposeful, routine, systematic and focused observation of persons, for the sake of control, entitlement, management, influence or protection. These elements, according to Murakami Wood[19], are definitional of surveillance (Murakami Wood, 2009, p. 4).

This epistemological background and its societal settlement raise ethical and legal issues. These issues are first related to the disappearance of the individuals and their expressive rationality as the primary sources of information about their identity, their social preferences and existences since those systems play the role of a sort of hidden hand collecting

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[17] Norris C. and alii, "The Growth of CCTV: a global perspective on the international diffusion of video surveillance in publicly accessible space", In *Surveillance and Society*, 2 (2/3), pp. 110-135, 2004.

[18] Bauman, Z., Liquid Modernity. Cambridge: Polity Press, 2000

[19] Wood, M. "Situating Surveillance Studies", IN Surveillance & Society, Vol 6, n°1, 2009.

information on bodies, faces, gazes and motions. This leads to a sort of reductionism regarding the individuals and their social being. Therefore it has tremendous consequences for the self-determination capacities of the individuals and for their social definition as human being. This issue is even more critical when the system supports decisions that have effects on the individuals and their social life. The traditional legal framework regarding personal data and privacy protection is critically challenged by this type of system since because of its opacity and its silent retrieval, it attacks both the principles of informed consent and of the right of access to the intelligibility of the retrieval.

### *4.3. Deliberation step : scenario building as a deliberative exercise*

As explain before, the aim of the human scientists' intervention is to explore the technological choices with the value principles set before in order to make them democratically sustainable. This requires organizing deliberative exercises around those choices with all the concerned parties of the project. During this process, human scientists have to play a role of facilitator in order to enable the fair and effective conditions for this deliberation. This role of facilitator does not mean that human scientists have to remain neutral during this process. They are, as the others, stakeholders of the project, so they have to be considered as 'situated facilitator' bearing, just as other stakeholders, moral and ethical values guiding their intervention and their questioning of the technological choices.

The deliberation about technological choices is difficult to make without placing those technological choices into social realities in order to better view their impacts on the social interactions.

This is the role of the scenarios. In its more general definition, a scenario is, according to L.B. Rasmussen20,

> *Scenarios are flexible means to integrate disparate ideas, thoughts and feelings into holistic images providing context and meaning of possible futures.*

This sense-making character of the scenario building process is also pointed out by M. GODET[21] when stating that the utility of this exercise is:

[20] L.B. RASMUSSEN (2005), *The Narrative Aspect of Scenario Building. How Story Telling May Give People a Memory of the Future* Online publication 12-8-2005, Springer Verlag, London Limited 2005

> *To stimulate the imagination, to reduce incoherence, to create a common language, to structure collective thought and to permit appropriation.*

In its philosophical or epistemological basis, a scenario does consider the future in a non deterministic way. That is a very important point of this approach since the scenario concept gives to people a real ability of action and transformation on their future. This is very well underlined by M. GODET when explaining that:

> *The future is, at least in part, the fruit of human desires.*

The first round of this scenario exercise is made by the industrials and the computer scientists. During this round they imagine the future social reality of the considered technology as they have in mind since the very beginning of the project. To help them to formalize this scenario, some guidelines are necessary in order to well specify the finality of the technology, the social ordering supported by the technology, the various processes performed by the technology, the distribution of roles and responsibilities between humans and technology,… To build the scenario, use cases can be developed to figurate the story board of the technology when operating in the considered social reality.

Usually, this first round of scenario building gives raise to a positive narration of the future of the technology and to a first collective exploration of the vulnerabilities that the technological choices could create for the autonomy of people and for the vitality of the democracy. This gives rise to first amendments of the technological choices regarding the technology itself but also its organizational arrangement.

But this positive narration does not allow to all the potential vulnerabilities and limits related to the technology to emerge. Therefore, a second round of scenario building is often necessary. During this second round, human scientists play a more active role, moving the settings of the first considered scenario in order to draw its "" or negative version. Moving the settings of the scenario means, for instance, to change its original finality (i.e. from safety finalities to prevent accidents and injures to security finality to protect area or borders), to change its spatiality ( i.e. from private to public spaces) and/or its operators and its responsible persons (i.e. from public body to private company). Blackening the scenario makes the limits and the vulnerabilities of the considered technological choices more visible and by then renders the industrial and the computer scientists more conscious about the risks

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[21] M. GODET (2006), Stategic Foresight, La Prospective : Problems and Methods, LIPSOR Working Paper, Issue 20, Paris, November 2006

related to the technological choices at work and the necessity to amend some of them in order to limit or to suppress those risks. This methodology of Blackening scenario is very inspired by the one developed successfully by SWAMI [22]project.

Two considerations must be made regarding this methodology of scenario building. First of all, during the deliberation, it is important to focalize on the technological choices and not on the scenario itself. The very sense of this process of scenario building is to understand that a same technology placed in a radically different social context of actors and finalities could have tremendous impacts on people. In other words, it is not because the scenario is positive that the technology does not present some risks and vulnerability for the autonomy of people and for the vitality of the democracy. This is not to conclude to a sort of neutrality of the technology and that all depend on its usage. On the contrary, this is to conclude that behind each technology, there are technical choices that are non neutral regarding the future of our society and of the individuals. So it is important to question those choices at the very early stage of their design and to open them to a broader deliberation in order to preserve, as far as it is possible, the values of autonomy and of democracy.

The second consideration regards the scope or the margin of the deliberation. This raises the issue of the limits of this type of deliberation. In fact, the deliberation takes place into the context of a project that to some extent is committed to perform results (prototypes or demos). This reduces strongly the margin of the negotiation: technical choices can be discussed and deliberated but the epistemological frame that supports the technology can not since it could mean a stop of the whole project. For instance, the epistemological ground of facial recognition of emotions technology is very questioning regarding its understanding of what emotion is and its reduction to a physical expression. But when this technology is at the very centre of a project and makes its core, the deliberation has to move from the technology itself to the conditions of its deployment and usage.

This is clearly a limit of this approach, raising also a more fundamental question regarding the freedom and the capacity of the human scientists when being placed into a technological project, and then part of this project.

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[22] Punie, Y., Delaitre, S., Maghiros, I. & Wright, D. (eds.) “Dark scenarios on ambient intelligence: Highlighting risks and vulnerabilities”. SWAMI Deliverable D2. A report of the SWAMI consortium to the European Commission under contract 006507, November 2005. http://swami.jrc.es

**Illustration based on the MIAUCE project**

Three main domains of application were defined for the MIAUCE project : safety, marketing and WEB TV entertainment. The illustration does concern the first one, i.e. the safety domain.

The first scenario drawn by the industrials and the computer scientists aims to detect people mass blocking escalator entrances or exits to provide information for optimal response. The MIAUCE multi-modal technologies will capture images and analyse images and results. The analysis will be able to report the detection of events (mainly normal / abnormal situations) and also events logs (motion detection, highly crowded areas, blocking in escalators, etc). Practically the general idea is to record escalator entrances and exits, cameras are placed on the ceiling pointing at the escalators. The expected output of the analysis is a warning system based on the automatic detection of abnormal events. The main actors concerned by the scenario is the owner of the airport, the appointed security firm in charge of the safety of the airport, the passengers and the commercial firm that procures and maintains the system. The expressed finality is clearly the safety of the passengers since the system is orientated towards early warning in order to avoid injures and accidents.

This first scenario sounds positive in its finality since it aims at protecting people crossing the airport. Nevertheless, this first scenario raises already interesting issues that have to be taken into account for the design of the technology and for its institutional settlement.

The first issue regards the technical specification of normal and abnormal events but also the learning dynamics of the system to parameter the detection. This is one of the most critical point of the system since it implies a real normativity of the future technology. This critical point appears relatively innocent when embedded into a positive scenario as the one described but can be much more questionable when related to other finalities. Even in the strict frame of this positive scenario, this point must be deliberated in order to disclose the choices made about what is considered as a normal behaviour of people and abnormal …

The second issue regards the data protection and the privacy of passengers. According to article 9 of the Directive, a clear information about the purpose of the processing, the nature of data and the data controller’s identity must be given to the data subjects, that should be present at both ends of the escalator. Furthermore, anonymization’s techniques have to be developed in order to protect the identity of any person in the observed crowd. The principle of data minimization must be respected, in the sense that only the necessary data for the implementation of the system should be collected, stored and processed, and that those data may not be conserved for a period exceeding the legal requirements. The storing of data in a

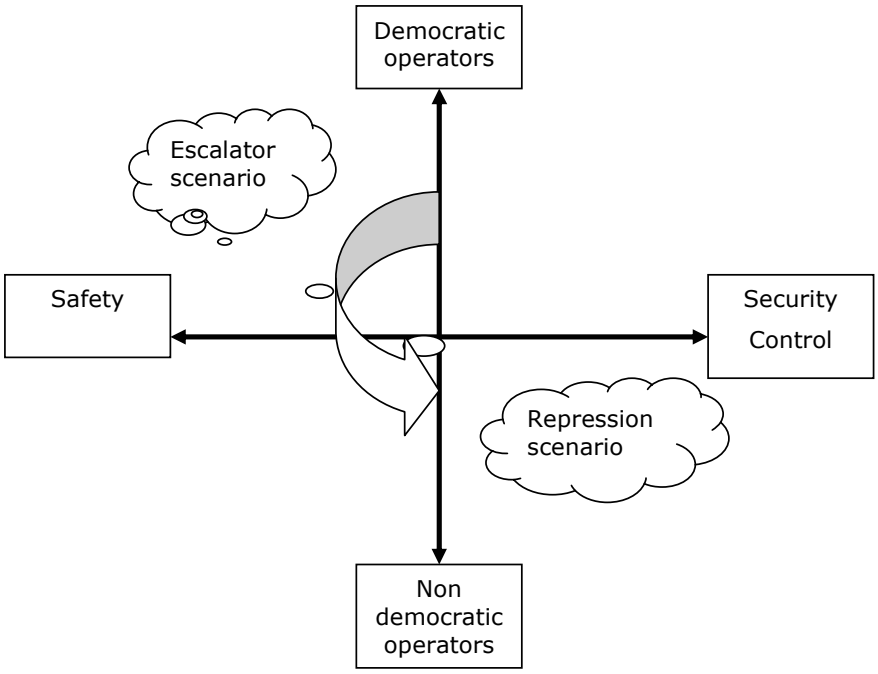
data base must be protected against any unauthorized access and the TV circuit used for this finality has to be clearly separated from any other network in order to avoid data retrieval for other finalities than the safety one.

The third issue regards the responsibility and the institutional settlement of the future technology. This settlement has to be clearly positioned in order to avoid misunderstanding regarding the capacity of the system and the sharing of responsibilities between the technological system and the security team in charge of the airport safety. This third issue is better approached when imagining a lack of liability or a failure in the defection of the system. Let us imagine a technical or a human failure, a problem of capture or of retrieval of data leads to the non-detection of a problematic situation. This defection has as consequence that a group of travellers collapses in an escalator and is seriously injured: this situation obliges to well define the capacity of the system and its technical and human limits.

In order to make the social and ethical issues related to some of the technical choices at work in the technology more tangible, blackening this version of the scenario appears necessary. This blackening requires defining other hypotheses and context for the same technology.

In fact, the same technology can be deployed in less benevolent environment. It is the reason why it is important to blacken the scope of the current scenario in order to better catch the implicit dangers or risks of this technological system for the autonomy of people and for the vitality of our democracy. This broadening process should clarify the human requirements to be incorporated into the technological design of the system.

In order to provoke the questioning, imagine that this system is deployed in a non-democratic country that is well known for its active and violent repression against human rights. This situation is not futuristic: the same system can be at very good use for repressive matter.




In this black scenario, the same system is deployed, but the purposes of intervention are oriented to the protection of the national security. The video streams are recorded in the database, and could be used as legal evidence. The context is not semi-public, like the airport, with a lot of security rules; but the context is the city centre, where the protests usually take place.

In that case, the scenario will not intervene to repair, but to repress people whose behaviours are considered as abnormal, suspicious. The system is coded with criteria [23], based on opaque parameters that sort out what is suspicious to what is not. If privacy is the most frequently discussed point, individual autonomy, transparency, consent and information are the major concerns that we can address to this system. But, a very important problem of categorisation, and thus of social sorting and normalisation could appear in this case.

The cameras and the related networked system become a tool of normalisation. The problem resides in the legitimacy of that normalisation: how to legitimize a system where there is no transparency and debates in the choices of criteria? This situation questions at least the

[23] We note here the obscurity related to the definition of a normal or abnormal behaviour. The social norms are usually tacit. Nevertheless, there is studies, asked by the UK home office about the anti-social behaviour: www.homeoffice.gov.uk/crimpol/antisocialbehaviour/. The collective responsibility and the social control are infringed and restricted to the definition given by the home office.

responsibilities of scientists and those who are concerned by the design, the trading and implementation of this type of system. In the MIAUCE context, this black scenario helps industrial and scientists to better understand the requirements of anonymization of the captured data not only related to the faces of people but also related to their morphology since those data can lead to effective risks of discrimination and of control. It helps also the designers and the industrials to better understand the risks of the technology under development and therefore to face more effectively the ethical and social issues during the design and the specification of the technological choices.

With this example, one can easily understand that this deliberation is somehow close to some choices to be made for the design of the technology. This deliberation does not concern the epistemological settlement of the technology. This is clearly a limit of this governance approach embedded into a technical project and therefore committed to help its design. But the understandings of this epistemological settlements and the tangibility of the risks related to certain technological choices have a large influence on the moral consciousness of all the actors concerned by this design. In that sense, it may change radically the approach of the technology and the care of its diffusion on the scientific and industrial scenes.

# Conclusion

Our ambition with this internal governance of a project is to open the design of a technology to its embedded moral and social choices and by then to act on this design from the very early stage of choices making. This approach is very inspired by the 'disclosive ethics' suggested by L. Introna as a way to democratize the technology and stems from same considerations about the technology. For L. Introna[24],

> *The design or use of information technology is not morally wrong as such. The moral wrongdoing is rather the nondisclosure of the closure or the operation of politics as if ethics does not matter – whether it is intended or not. We know that power is most effective when it hides itself (Foucault 1975).*
>
> *Thus, power has a very good reason to seek and maintain nondisclosure. Disclosive ethics takes as its moral imperative the disclosure of this nondisclosure – the presumption that politics can operate without regard to ethics – as well as the disclosure of all*

[24] L. Introna, Disclosive ethics and information technology: disclosing facial recognition systems, Ethics and Information Technology, 7 (2). pp. 75-86. ISSN 1388-1957

> *attempts at closing or enclosing that are implicitly part of the design and use of information technology in the pursuit of social order.*
>
> *Obviously at a curtain level design is rather pragmatic question. However, it is our contention that many seemingly pragmatic or technical decisions may have very important and profound consequences for those excluded – as we will show below. This is the important task of disclosive ethics. Not merely to look at this or that artefact but to trace all the moral implications (of closure) from what seems to be simple pragmatic or technical decisions – at the level of code, algorithms, and the like – through to social practices, and ultimately, to the production of particular social orders, rather than others.* (pp. 78-79)

As well explained before, this disclosive analysis remains a limited exercise. In fact due to the full involvement and commitment of the human scientists into the project, it is hard to go outside of the specific project to question the epistemological closures on which the project is settled. This is one of the important limits of the approach even if the deliberation questions this epistemological settlement and by this contributes to sort of broadening of the rationality of all the involved actors.

The external governance addresses this limit but also ambitions to give existence to the voice of the public to deliberate on a more democratic scene the technology at work in the project.

# Part 2. The External Governance of the Technology

## Introduction

Mis en forme : Anglais Royaume-Uni

This second part of the report does concern the methodology used in the MIAUCE project to involve the 'Society at large' in the deliberation of the technologies at work in the MIAUCE project. This requirement to get the deliberation out of the strict limits of the MIAUCE Project and its direct stakeholders is both a democratic and a scientific requirement since it opens the deliberation of the project to a societal intelligence which lies beyond the rationalities of the direct stakeholders of the MIAUCE project. Giving the voice to the 'Society at large' raises several issues. The first one does concern the political finality of such a deliberation's widening. It raises the question of the Governance of Sciences and Technologies and of the different ways to foster its democratic settlement. We address this first point in the first section of this second part of the Chapter. The second critical issue is about the public and could be summarized by the following question: how to make this public exist? In fact, the concept of the public is quite fuzzy and vague and has by itself no social existence. Therefore, the public has to be defined and in a sense constructed in order to question its voice. The difficulties to set up a public to deliberate about the MIAUCE technologies and the approach we have defined are discussed in section 2. When the public is identifieds, the methodological channels to enter in discussion with it are critical to define. These methodological considerations are developed in the third section showing that contrasted choices have been according to the considered 'public'.

## 1. About Science and Governance : Principles and Methods

Science is "broadly conceived as a special kind of knowledge along with a distinctive set of practices and cultures for producing it"[25]. The concept of science has been mainly defined and debated, but we agreed on the fact that it is a human activity, including social institutions,

[25] Ozolina, Z. and alii, « Global Governance of Science. » Report of the Expert Group on Global Governance of Science to the Science, Economy and Society Directorate, Directorate-General for Research, European Commission, 2009, p. 8.

professional organizations, government agencies, universities, laboratories and private companies, that produce a kind of knowledge allowing people to intervene on the world. Talking about the governance of science "raises multiple questions related to both the processes of science and its products" [26]. The European Union (EU) has edited some recommendations concerning the external governance [27]:

"External governance seeks to provide, regulate, and distribute science by:

1. Upstream funding of some types of research in over others thus channelling scientific research in specific directions;

2. Establishing rules and enforcing standards for people and organizations;

3. Attaching certain attributes, such as property rights, to scientific knowledge and the products of innovation;

4. Downstream regulations or restricting what are considered the misapplications and misuses of new science and technology;

5. Educating the public and encouraging debate about the products and the processes of science."

The existence of science is weaved with technology, innovation and socio-economic change, as well as the cultural change. The EU recommendations show a model of external governance similar to the first model of 'technical democracy', following Callon and alii [28] (see after), called the model 'Public Understanding of Science'.

## 1.1. Which 'technical democracy'?

The concept of « technical democracy », as coined by Callon and alii, encompasses the whole process of decisions acting the research and innovation policies. It follows the reflections

[26] Ibidem.

[27] Idem, p. 11

[28] Cf. Callon, M., Lacousmes, P., Barthes, Y., « Agir dans un monde incertain, essai sur la démocratie technique », Seuil, 2001.

among the management of risk in the post-industrial society. Following Callon [29], three main models define the relations between Science and Society: 1. The Public Understanding of Science; 2. The Public Debate; 3. The Co-production of Knowledge. This table illustrates three main models of the technical democracy.

| | **Relations science / society** | **Objectives** | **Expertise's conceptions** | **Objectives of public policies** |
|---|---|---|---|---|
| **1. Public Understanding of Science** | Autonomy | Public information and education | Separation between experts and profanes | Restore trust and promote acceptability |
| **2. Public Debate** | Complementary | Inclusion of contexts and implications | Reinforcement of the representation of the public concerned | Public discussion and negotiation |
| **3. Co-production of Knowledge** | Reciprocal dependence | Participation of the concerned groups in the elaboration of knowledge | Symmetrical repartition of expertise between actors | Production of socially robust knowledge |

The first model considers the science as a unified institution inside the public space, producing a neutral and objective knowledge. Moreover, the rationality is only attributed to the science's knowledge, detained by scientists and experts, excluding therefore the whole profane knowledge. In the risk's management point of view, the strategy consists in informing and explaining the public about the risks and doubts related to the new technology or technological organizations; indeed, the problems are supposed to get resolved by a strong policy of information and education, restoring trust towards science and scientists. This first model has been denounced mainly in the literature and reveals a paternalistic position towards

[29] Callon, M., « Des différentes formes de démocratie technique », available in : http://www.cognition.ens.fr/traces/ressources/articles/callon_difficile.pdf

the non-experts. A sociological research (PABE) [30], which concerned the public perceptions of GMO, has ruined the myth that a good education and information policy allows the public's agreement. It showed, first, that a better comprehension of genetics from the opponents of GMO facilitate their agreement was a myth generated by the scientists and the GMO stakeholders. Moreover, it showed that more knowledge generate more scepticism and more standpoints towards the public policies about biotechnologies. In this model, experts and scientists believe that a scientific proof is sufficient to convince people, as well as it works in the scientific world; forgetting that the scientific discourse is not the only one convincing: political, economical, legal, ... discourses convince too. Stakeholders and scientists neglect values and social contexts, promoting their own interests. Nor collective deliberations neither participative method are envisaged in this traditional approach.

The second model of the technical democracy, called the "Public Debate", opens the discussion between actors implied in the controversy. It is normal to deliberate about a technological innovation. Some participative methods, as well as focus groups, consensus' conferences, etc , are set up in order to promote the public's point of view. In this approach, scientists and stakeholders are responsible and sensible to social contexts and values. They are conscious that a technological change can upset cultural and social identities.

The last model, called the Co-production of Knowledge, tries to include the non-experts in the building of the knowledge about a technological innovation towards they are concerned. The profanes' contribution is essential, contributing really and dynamically in the building of knowledge. This third approach exceeds the Public Debate model, which considered the non-experts' contribution as a reinforcement of the stakeholders and scientists statements. The co-production of knowledge results of the creative tension between the production of standard knowledge in the confined laboratories, and the production of knowledge generated by the complexity of the local, socio-economical contexts and the diversity of standpoints shared by the different actors. The users of the technology become partners in the building of knowledge

[30] Marris C., Wynne B., Simmons P., Weldon S., "Public Perceptions of Agricultural biotechnologies in Europe (PABE Final Report)", Commission of European Communities, Lancaster University, 2001, p. 78. Rapport available : http://www.lancs.ac.uk/depts/ieppp/pabe/docs.htm

[31]. This last approach will be deeply developed forward, with the notion of Socio-technical Controversy and the Hybrid Forum.

Obviously, one cannot apply the second and third model to every situation of production of knowledge. A confined research is sometimes required, notably for fundamental research. However, in the case where the technology is supposed to get installed in the society, a participative approach, as well as the second and third model present, is strongly wished.

## 1.2. Participatory Methods and Socio-technical Controversy

When experts and scientists have to cope with a risk situation, schemes of rational decision-making exist. But when they are in an ignorance situation towards the technological and/or scientific uncertainty, they are facing the entire hypothesis in order to explain, understand, plan, and elaborate sketches of solutions. When debating, they cope with a controversy. Following Callon et alii, a 'socio-technical controversy' is generated by social and technological uncertainties, and the limits between social and technological are blurred, and become issues of the controversy. Another term to design??? Some questions punctuate the definition of a controversy: what are the uncertainties about the situation/innovation? What social groups / actors are embedded in the controversy? What hypotheses are proposed for the debates?

Another interesting point, following Callon et alii, is that socio-technical controversies constitute an enrichment of the democracy [32].

In order to set up this democratic debate, a methodological frame has to be designed. Here is a

[31] For a good example: Alain Kaufmann, "Mapping the Human Genome at Généthon Laboratory: the French Muscular Dystrophy Association and the Politics of the Gene", in The mapping Cultures of 20th Century Genetics, H.J. Rheiberger and J.P. Gaudillière, London: Taylor and Francis, 2003.

[32] Callon, M., Lacousmes, P., Barthes, Y., *Agir dans un monde incertain, essai sur la démocratie technique*, Seuil, 2001, p. 49.

summary of the main participatory methods used in the frame of Technology Assessment [33]. The participatory methods are flexible and could be employed and adapted in different ways, according to suit the purposes.

**Focus group** 34

A focus group is a planned discussion among a small group (4-12 persons) of stakeholders facilitated by a skilled moderator. It is designed to obtain information about (various) people's preferences and values pertaining to a defined topic and why these are held by observing the structured discussion of in interactive group in a permissive, non-threatening environment. Thus, a focus group can be seen as a combination between a focused interview and discussion group. Focus group can also be conducted online.

**Citizens' Juries** 35

The citizens' jury method is a means for obtaining informed citizen input into policy decisions. The jury is composed of 12-24 persons who are either randomly selected or otherwise representative of a given public or set of stakeholders. The jurors then go through a process of deliberation and subgroups are often formed to focus on different aspects of the issue. Finally, the jurors produce a decision or provide recommendations in the form of a citizens' report. The sponsoring body (e.g. government department, local authority) is required to respond to the report either by acting on it or by explaining why it disagrees with it. Usually a 4-5 day process, the citizens' jury is intended to provide a means for more democratic decision-making.

**Consensus Conferences** 36

[33] Directly extracted from Nikki Slocum, « Participatory Method Toolkit. A practitioner's manual », published by the King Baudoin Fundation, 2003. Available on : http://www.kbs-frb.be/uploadedFiles/KBS-FRB/Files/EN/PUB_1540_Participatoty_toolkit_New_edition.pdf

[34] Idem, p. 97

[35] Directly extracted from Nikki Slocum, « Participatory Method Toolkit. A practitioner's manual », published by the King Baudoin Fundation, 2003, p.193.

[36] Directly extracted from Nikki Slocum, « Participatory Method Toolkit. A practitioner's manual », published by the King Baudoin Fundation, 2003, p. 193

A consensus conference is a public enquiry centred around a group of 10 to 30 randomly selected citizens who are charged with the assessment of a socially controversial topic. These laypeople put their questions and concerns to a panel of experts, assess the experts' answers and then negotiate among themselves. The result is a consensus statement that is made public in the form of a written report directed at parliamentarians, policy makers and the general public that expresses their expectations, concerns and recommendations at the end of the conference. The goal is to broaden the debate on a given issue, include the viewpoints of non-experts and arrive at a consensus opinion, upon which policy decisions can be based. Consensus conferences usually have a 3-day intensive programme that is open to the public.

# 2. Societal Governance of MIAUCE : a Deliberative Approach

## 2.1. Deliberative Approach and Common Good

After having described the main models of the technical democracy, as well as the participative methods we used, let us describe what we did in the MIAUCE Project. The demand of social acceptability, required in the MIAUCE technical annex, raised us to question the internal and external governance for a European Project, which contents industrials, scientists and human science researchers. From an internal point of view, it was very important to give priority to the collective deliberations as modes of governance, sharing and crossing knowledge, methodologies, disciplines, promoting co-learning, and taking distance towards experts' figure, knowledge and confined research. Our approach as human science researchers consisted in opting for collective deliberations in different levels; and therefore we abandoned the role of experts, traditionally supposed to exert a judgment *a posteriori* about a technological organization. During the first year of research, we deliberated among CITA and CRID researchers, the second year of the project was devoted to a collective deliberation about the three scenarios between all the partners, and then the last year of the project, we opened the deliberation to the 'civil society', convening experts and activists in an online survey, and groups of interests by organizing Focus Groups.

During every step of deliberation, we tried to build a "Situated Common Good": searching a Common Good that was not inapplicable because too universal or theoretical, but a specific Common Good, adapted to the situation (situated [37]). Always exploring amongst the values and principles, notably with the four principles of Childress and Beauchamp [38], this constant

[37] It is a reference to the 'situated knowledge', concept coined by D. Haraway in "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective", in Feminist Studies, Vol. 14, n° 3, 1988, pp. 575-599.

[38] Beauchamp T. L., Childress J. F., "Principles of Biomedical Ethics", 5th ed., Oxford University Press, 2001. For an accurate development of these four principles, see the previous deliverable D.5.2

research and sharing of values and principles guided us during the deliberations. We got also inspired of the "veil of ignorance" of Rawls réf, which consists in a thought experiment, a hypothetical designed to accurately reflect what principles of justice would be manifest in a society premised on free and fair cooperation between citizens. This position is interesting in the sense that we can create a kind of "social contract" between all of us, whenever taking in account the specificities and requirements of the context in which we are involved. As much in the online survey as much in the focus groups, we managed to gather the values of the respondents, trying to connect the values to the technologies and the systems.

## 2.2. A public for MIAUCE

How to make exist a public for MIAUCE? The possibility of a socio-technical controversy was counteracted by the contingencies of the MIAUCE Project. We were not in front of a controversy *stricto sensu*. Let us remember the situation: three kinds of partners, with completely distinct competences, tried to elaborate three socially acceptable scenarios. We were stakeholders. Every partner has his own requirements, interests, objectives, that were often very dissimilar. There was no controversy, because no public, civil society, association were nor present nor convened to create it. Following Lippman and Latour [39], the public is a democratic fiction, a phantom, it does not exist really.

We realised that we have to impulse a public first of all because the concept of "civil society" remains very fuzzy and vague when when willing to approach its opinion. A second reason regards the fact that the so-called "civil society" is not yet structured by different groups of interests concerning the OST . Several reasons tend to explain this lack of awareness from a potential public. First, the OST do not attack directly people 's bodies integrity and do not represent a 'bodily' danger, unlike GMO or nuclear. Moreover, OST are mostly presented as a rapid and efficient answer to political crisis. Structured and didactical information concerning the uncertainties, dangers and implications are strongly missing. Only a few of activists, well informed, are aware of the potential consequences of the OST.

[39] Bruno Latour presents the french translation of Walter Lippman's book « The Phantom Public » (firstly edited in 1927) and prefaces it : Lippman, W., « Le public fantôme », Paris, Demopolis ed., 2008.

Inspired by the participative methods, we tried to practice both quantitative and qualitative methods, with quite the same structure of questionnaire, in order to cross the results afterwards. We elaborated an online survey, firstly dedicated to experts. Then some activists joined and responded thanks to the blog 'LeMonde.fr' but their responses were processed separately. In the same time, we organised focus groups, aiming to reach the 'civil society' which is not indentifiable as 'tangible' population and therefore difficult to approach by quantitative sample and survey but also because part of those groups do not have access to Internet due to the Digital Divide.

# 3. Online Survey : Public and Method

Let us describe what we did in the third year, where we enlarged the debates: we recruited on a voluntary basis a public for MIAUCE. We organised an online survey: it is a survey working along quantitative methods.

## 3.1. Which Public for The Survey?

In the beginning, we recruited only 'experts', e.g. individuals whose position and/or professional activity leads to their development of informed opinions about OST. We called this panel the 'Rational' since their opinions is mainly guided by their rationality, their knowledge and experiences regarding OST. Thanks to the fact that the online survey was mentioned in a blog of 'TheMonde.fr', a sample of activists responds to the survey. We qualify this population as 'passionate' due to that its opinions are motivated by a strong, sometimes radical as it will be clear in the analysis below, bent against OST due to the threats it implies for fundamental rights and liberties. While it may have been possible to blend this group of respondents within our expert respondents, we have chosen not to do so. Separating them from expert respondants indeed seemed to us interesting so as to evaluate the variations and divergences between our expert respondents and this population as regards to their opinions about OST. .

### *3.1.1. The 'Rational' Population: the Experts*

The first population targeted by this questionnaire is that 'experts' in information and communication technologies (ICT) and OST. By 'experts', we mean individuals whose position and/or professional activity leads to their development of informed opinions about OST. So as to constitute our sample, we have constituted a list of 500 e-mail addresses of:

- Scientists and engineers participating to national, European R&D projects or belonging to COST networks related to OST;
- Individuals – researchers and functionaries – working for Technology Assessment organisms and institutions. These were identified among others through the website of the European Parliamentary Technology Assessment. The address of this site is as follows: http://www.eptanetwork.org. In this group, we have more specifically targeted individuals dealing with ICTs;
- Individuals – researchers and functionaries – working for associations and organisms for the protection of privacy and/or the defence of fundamental rights and liberties.

So as to maximise the number of respondents, the questionnaire has been communicated twice to the mailing list so compiled. Each time, we left out the questionnaire for about two weeks. Out of the whole of the contacted population, we have received 106 usable questionnaires, that is, about a 20% answering ratio, which is considered normal for the collect of data through on-line questionnaires.

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### *3.1.2. The Passionate Population: the Activists*

Our second population is thus constituted of engaged militants criticising and striving against OST due to concerns and worries for the respect of fundamental rights and liberties**.** Identifying this population of activist respondents has been done in a more exploratory way. Lacking a basic mailing list for this type of population, we have proposed to have the questionnaire mentioned in a posting in the blog of the French newspaper *Le Monde* in May 2009. This experiment was rendered possible thanks to some collaboration with the journalist in charge of the blog. The address of this blog is as follows: http://bugbrother.blog.lemonde.fr. This blog seemed to us interesting as it aims at questioning, challenging and criticising surveillance practices and policies and is addressed mainly to activists and militants for the protection of fundamental rights and liberties. The questionnaire was put on-line on this site on May 12th, 2009, and has remained accessible till May 31st, date when we stopped collected data. We have collected through this blog an additional sample of 84 usable answers.

## 3.2. The structure of the survey

Here after is the structure of the survey. The complete and detailed version is annexed. We wrote the questions following the hypotheses we made during the previous years, and in the previous deliverables. The first step interrogates the respondents' values: the conceptions of the society wherein you feel well, and also who ought to be in charge of such a society, the political and privacy values. The second step collects opinions regarding the video-surveillance: levels of acceptation, usefulness, necessity, modes of regulation, limits of the systems and prospects of the video-surveillance. The third step, likely the focus groups' structure, questions the MIAUCE scenarios, assessing their relevance and their social acceptability. The last step question specifically the regulation of the video-surveillance, including problematic related to privacy legislation, responsibilities and information about OST, social and political usefulness, modes of contestations, modes of installation of OST in public spaces.

The writing of this questionnaire has been a very difficult exercise since many terms related to the OST systems are negatively connoted as, for instance, surveillance, video-surveillance, profiling, etc. We tried to keep as neutral as possible in the writing but we did not escape to the constraint of using terms that respondents know. This was particularly the case to nominate the technologies and the systems considered by the questionnaire. The fact that Multimodal Interactions Analysis of Users in a Controlled Environment technologies and systems are not known except by a small number of experts obliged us to use more common-used terms as observation or surveillance systems. This has probably introduced some bias in the collected responses.

The major objective of this survey was to collect opinions of experts and activists regarding some hyotheses raised during the whole MIAUCE project in order to make them confirmed or infirmed by our respondents. So we analysed the results according to descriptive statical techniques and we did not more advanced statistical analyses due also to the small sizes of the two considered populations.

# 4. Focus Groups : Participants and Method

The major aim of a Focus Group is to provide information about preferences and values of targeted citizens (8 to 20) on particular topics. Given presence of a moderator, a focus group is a kind of focused interview which undertook a discussion group.

Focus Group is a qualitative method very helpful in order to assess the nature and intensity of stakeholders' concerns and values about the deliberated issues.

## 4.1. The Participants: Majoritary, Common and Precarious

The participants selected for these FC were, first, a group of about 20 trade union workers participating to courses at the *Ecole syndicale* of the CNE, the *Centrale Nationale des Employés*, second, a dozen followers of French classes at the CIRE, the *Coordination et Initiative pour Réfugiés et Etrangers* (French being a foreign language for the participants to these classes), third, the members of the Namur Rotary Club, and, fourthly, a dozen of prison staff and a dozen of prisoners of Arlon prison.

### *4.1.1. The Typology : Justification*

We propose to use a typology inspired by analyses by Le Blanc, *Vies ordinaires, Vies précaires*, and by Deleuze and Guattari, authors of *A Thousand Plateaus*, which suggests to categorise our sample as made of people 'precarious', 'common' and 'majorities'. We will look at the prisoners and French classes followers as the 'precarious' category. The penitentiary staff and the trade union workers will be looked as the 'common' category, and the Rotary Club members as the 'majorities'.

Through these FG, we have been looking towards highlighting the social and economic tensions separating 'majorities', 'common' and 'precarious' in the French-speaking Belgian society. Our main problem following on from the on-line survey was about who would arguably be identified as falling under one or the other label. The questionnaire was indeed insufficient to reveal these groups and make them express their opinions. On the one hand, the 'precarious' were generally a disseminated category, most likely to be lack an easy access to internet and on-line resources - the Digital Divide indeed often leads to difficult access to, and use of computerised interfaces and internet. On the other hand, the literature survey on the acceptability potential of the MIAUCE scenarios – realised as part of the second deliverable [40] – also led us to the realisation of video-surveillance systems leading out to exclusion phenomena. Some of the persons filmed in the classic situation of video-surveillance usage in public space may suffer from later discriminations based on their skin colours, gender, age

[40] See the surveillance studies : www.surveillance-and-society.org

and/or clothing. In this sense, video-surveillance usage accentuates discrimination. The 'precarious' being characterised by a negative, disqualified, excluded social identity, it thus seemed appropriate to use the FC method to obtain opinions out of 'precarious', 'common' and 'majorities'.

### *4.1.2 Presentation of the Panels*

The FG methodology implies the contacting of people sharing specific characteristics and common interests, the so-called 'stakeholders'. We consider as the 'majorities' those whom Deleuze and Guattari categorise as the 'standard/norm',[41] that is those serving as reference, example of social normality; that means classically the white man, the 'WASP', the 'upper middle class' individual. In *A Thousand Plateaus*, Deleuze and Guattari indeed develop a theory of minority politics wherein majority and minority are assessed using quantitative arguments but rather through an exploration of power distribution in society. In their words, this means that:

"When we say majority, we are referring not to a greater relative quantity but to the determinationof a state or a standard in relation to which larger quantities, as well as the smallest, can be said to be minoritarian: white-man, adult-male, etc. Majority implies a state of domination, not the reverse. It is not a question of knowing whether there are mosquitos or flies than men, but of knowing how "man" constituted a standard in the universe in relation to which men necessarily (analytically) form a majority" [42]

This approach of looking out for the 'common' and ''precarious' was part of our will to highlight the existence of a public, of an audience to the MIAUCE mutli-modal video-surveillance scenarios. This was inspired by our reading of the literature, which seemed to us to suggest the targeting of fragile and economically and socially unstable population groups. Collecting opinions on the part of these groups meant for the possibility to let another kind of public, usually deprived of public visibility and expression, to let its opinions known. The FC were in this sense oriented towards revealing communities sharing specific interests as regards to technologies. Towards this purpose we have chosen to visit prisons, where we talked with prison staff and prisoners, to contact refugees, and trade union workers. To sum

[41] Deleuze et Guattari, « A Thousand Plateaus », London : the Athlone Press, 1988, p. 291.

[42] Idem, p. 291.

up, it was so as to show off the existence of a silent public to the three MIAUCE scenarios, and provide alternative discourses on social acceptability that the FC were organised.

According to Le Blanc, the 'common' [ordinaire] is an individual who constantly negotiates with social norms so as to maintain a decent way of life. This objective of a decent way of life is promoted by the author in his 2007 *Vies ordinaires, Vies précaires*, where he argues for 'caring' politics, inspired by the feminist ethics of 'care'. The 'ordinaire' has a social function, among others through his participation to the workforce, to consumption practices, etc. Norms, rules, social conventions are taken into account, ingested by the 'ordinaire', and his/her ordinary life is characterised by the latter ingestion. The freedom of the 'ordinaire', the white man says, consists in plyaing with and against these norms, rules and conventions that are as much qualifications. It is thus that one becomes equipped to explore the prevcariousness and instability of a disqualification. In this category of 'common', we find the CNE *Ecole syndicale* participants, made of union trade workers (among others out of the distribution and transports sectors) and the prison staff at Arlon. In some ways, this 'ordinaire' category thus includes workers to whom the 'Marketing' and 'Safety' scenarios are full of meaning as regards to their professional activity. This special meaning of safety, and surveillance technologies, in particular was quite clear in relation to security and safety staff, e.g. prison staff. Union trade workers were on their part quite sensitive to issues related to the 'Marketing' scenario.

The 'précaire' individual, in a quite contrasted way, is rather best defined by his/her invisibility and inexistence in the democratic social system, leading out to a trend in studies devoted to the 'subalterns'. *Can Subalterns Speak?* is a founding text of the so-called 'Subaltern Studies' that attempt to give space for the expression of those lacking it. In this sense, feminist studies have also claimed on the need of solicitude, calling for caring politics, on the need to look for and care for exception, e.g. Butler, and the rights of minority, e.g. Deleuze and Guattari.[43] The 'précaire' is one who exists despite being the antithesis of social normality, the one whose career has emerged despite his/her not contributing to performance normativity, or profitability, etc. As the prisoners in Arlon answered when asked "what is a society in which one feels well?," "why asking this question? We are not part of society; we are outside of it." This acute consciousness of being excluded, out of the game is hared by other groups, such as refugees, jobseekers, and refers to the social normal imperatives such as

[43] Strictly speaking Deleuze and Guattari are not feminist writers. What we mean here is that they display the same kinds of concerns than feminist authors.

wealth, security and safety, freedom. The 'précaire' is out of the game, beyond the reach of power, and deprived of public voice. This inclusion of the 'précaire' is thus a reflection of one of our desires to include in our exploration of the voices of an alternative public on acceptability issues. Following on Le Blanc, speaking for the 'precarious' is an endeavour of mutual translation between the language of the 'precarious' and that of the 'majorities'. As he expresses himself:

"Trying to fix the concept of precariousness, it would be, beyond the double effort of translation – translation of political words in the precarious langage, translation of precarious langage in the philosophical langage-, a contribution to the restoration of the precarious voices, too rapidly removed from the concert of the modern democracies. " [44]

As such we wished too that the public we were creating would include some of these invisible individuals, these 'useless' individuals excluded by society. More in practice, our work, though using the methodology of FG, has involved a rather limited number of applications. In some ways, thus, our results only have a limited, mostly exemplative, value. They nevertheless are a useful complement to the on-line questionnaire, and have at the least the merit to allow for the collection of opinions of well-focused social groups. Also, we also wished to collect the opinions of two additional groups, that of the young individuals (up to 25 years old) and that of the elderly people (aged of 60 years or more). These two groups, despite several attempts on our part, have declined our invitation to participate to a FG. Mostly they did show little interest in video-surveillance issues. Specifically, no member of the *Fédération des Seniors*, where we disseminated the invitation through the monthly journal, has manifested any interest in the FC, and students at the *Faculté d'informatique* of the University of Namur, where we are based, have similarly not shown off interest for the FG. Could it be that this lack of interest is witnessing of a relative of interest for videosurveillance and privacy issues among the youngest and eldest layers of Belgian society? The question remains open but it seems in the first instance that this may mean that these two groups feel relatively little concerned by these problematics. Such reflections are however to be formulated carefully: most members of the Rotary Club were indeed all quite older, being all about 60 years of age or more.

[44] Le Blanc, G., *Vies ordinaires, Vies précaires*, Paris, Seuil, 2007, p.18. My translation.

## 4.2. The method

We have organised six Focus Groups, hereafter 'FG', in French-speaking Belgium, each of which was structured as follows.[45] The first theme was that of the values underlying 'a society wherein one feels good', the conditions required for its existence and its constraints and limitations. The second theme was the three MIAUCE scenarios, which were submitted to an assessment, covering issues of their social acceptability. Thirdly, and lastly, participants were asked to elaborate on some potential recommendations to EU authorities.

**MIAUCE Focus Group's structure**

**1. Brainstorming about the conceptions of a « well-being society »**

- How do we define a well-being society (3 criteria)
- What are the conditions allowing a well-being society?
- What's against a well-being society?

**2. MIAUCE's project presentation**

- MIAUCE's project (governance, partners, scenarios, technologies)
- Security Scenario : description, objectives, technologies
- Marketing Scenario: description, objectives, technologies
- Web-TV Scenario: description, objectives, technologies

**3. Assessing the scenario**

- What are the negative / positive consequences implied by each scenario?
- Is it a useful / helpful scenario?
- Is it a necessary scenario?
- What kinds of public do the scenario and the technologies concern?
- What kinds of places do the scenario and the technologies concern?

**4. What kind of social acceptability?**

-Does the scenario satisfy to the requirements of:

Justice?

Equality?

Freedom?

(please explain your choice)

[45] Cfr the appendices to this report that include the powerpoints prepared for the FG and the detailed reports that ensued.

- May the scenario discriminate? If yes/no, why?

- May the scenario weaken social links? If yes/no, why?

- How do you connect the requirements of a "well-being society" and the scenario contingencies?

- What kinds of ruse or resistance can you imagine concerning the scenario?

**5. Recommendations**

- What kind of recommendations would you address:

- Concerning the public funding of these technologies?

- Concerning the social and legal responsibility of the public decision-makers?

- Concerning the development of the technology?

# Conclusion

These different layers of discussion and deliberation raised questions about what constitutes a 'technical democracy' (see above) and especially the technical democracy we want to develop in the MIAUCE Project. We detailed the main models of 'technical democracy' as well as the concept of Socio-technical Controversy and different kinds of participative methods. During the MIAUCE Project, we get inspired of those methodologies and definitions, trying to elaborate and to practice them.

We practiced the second model of technical democracy: the Public Debate. Even if we practiced the co-learning among the MIAUCE partners, we were not profane. We mixed the methodologies. We managed an online survey for experts. This online survey succeeded so well that it was published in a blog in the online version of 'LeMonde.fr'. A lot of activists, often connected to the blog, responded to the online survey. It enriched the results of the survey, and changed the configuration of the public as planned previously. We had to assemble profanes so that we can take their opinions in account. We organized focus groups: it raised a collective dynamic and some contrasted representations. The focus groups were sampled with the criteria of what gather them; we called them groups of interests [46]. As we recruited groups of interest as voluntaries, the focus groups are not homogenate, but representative of groups that felt implied by the OST problematic. The results should be read and interpreted in a very qualitative way. Finally we gathered the entire collect of opinions,

[46] There were: prisoners, penitentiary staff, union trade staff, migrants & refugees french-langage scholars, members of Rotary Club.

and it helped us to write recommendations. Let us remind Lippman and Latour [47], the public is a democratic fiction, a phantom, it does not exist really. What we thought is that we need to create it. It is this creation that we have experimented during this stage of external governance.

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An interesting remark concerns the fact that if the GMO, biotechnologies, nuclear provoke debates and controversies, it is not so relevant regarding the OST (Observation and Surveillance Technologies). Our hypothesis is that people do not perceive risks for health, environment, or their own integrity, as well as they could perceive for GMO, nuclear or biotechnologies. The OST present an apparent harmlessness, probably because it is supposed to preserve safety and security. Citizens rarely contest the presence of cameras in the public spaces, except sometimes the Human Rights association or Privacy association. Paradoxically, the results of the online survey and the focus groups have showed a large negative consensus towards the usefulness and necessity about the three MIAUCE scenarios (for the detailed results, see above). How to interpret the gap between these two positions?

This question brings us to a main one: why debate collectively about some OST scenarios? The conclusions of many researches and studies [48] about the impact of the urban video-surveillance and, more generally, the presence of OST, confirm that the promises of the video-surveillance have been largely overestimated. The Home Office Research Studies [49] has recently demonstrated that it has only a very few effect on delinquency. The conclusions underline that it costs a lot, and moreover it is very difficult to recognize delinquents on the images. A police presence is more efficient. The crime is social problem that can be resolved by a technological solution. Otherwise, it is a popular process because it is visible. It gives the impression that the police take measures against crime. Although the video-surveillance weakens the social link and generates a mistrust feeling inside the society. If people witness

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[47] Bruno Latour presents the french translation of Walter Lippman's book « The Phantom Public » (firstly edited in 1927) and prefaces it : Lippman, W., « Le public fantôme », Paris, Demopolis ed., 2008.

[48] Amongst plenty of studies and researches, the main studies about OST (that we got inspired): Home Office Research Studies www.homeoffice.gov.uk/rds, Surveillance studies www.surveillance-studies.net , Surveillance and Society Studies www.surveillance-and-society.org ; CNIL www.cnil.fr , Urbaneye Project www.urbaneye.net

[49]"Assessing the impact of CCTV", Home Office Research Study 292, 2005, www.homeoffice.gov.uk/rds/cctv2.html

an aggression, they do not tend to intervene thinking they do not feel responsible. For a political point of view, this system increases a worrying privatization of security: it needs a lot of technicians, experts and security staffs. Sometimes governmental institutions employ some private companies that have their own formation and recruitment system.

The online survey underlined how much the myths about the video-surveillance are persistent. Two main myths are underlined: the first tells that the video-surveillance decreases the insecurity feeling, and the second that it is useful in the case of the terrorism, children protection and public spaces protection. All the respondents, from the online survey and the focus groups, remain??? those two myths, validating them generally, while being critical regarding their relevance and legitimacy. It means that they think that the majority believes in these two assertions, while they can affirm too that they do not believe.

Another statement regarding the external governance would question the European Union's (EU) ambitions concerning the scientific policies.

1. What does the EU want to promote, while funding OST Project?

2. The MIAUCE Project funds Marketing and Web-TV scenarios,

3. And finally, what kind of Science is promoted? Ethical and legal values, presence of lobbies that influence the design towards some Companies' interests,